

**Supplement 1:** Invasive cervical cancer (Cca) incidence rates, incidence rates ratio comparing others ethnicity with non-Hispanic and US born with foreign born women per 100,000 for California Non-Hispanic White, Hispanic and Asian subgroups by nativity, 1990-2004.

|                    |              |              | Total invasive Cca | Histology     |               | Stage         |               |               |
|--------------------|--------------|--------------|--------------------|---------------|---------------|---------------|---------------|---------------|
|                    |              |              |                    | SCC           | Adeno         | Local         | Regional      | Distant       |
| NHW                |              | Rate (95%CI) | 4.1 (4-4.2)        | 2.7 (2.7-2.8) | 0.9 (0.8-0.9) | 2.2 (2.1-2.3) | 1.3 (1.2-1.3) | 0.4 (0.4-0.5) |
| <b>Hispanic</b>    | Foreign-Born | Rate         | 6.6 (6.3-6.9)      | 4.7 (4.5-5)   | 1.2 (1-1.3)   | 3.3 (3.1-3.5) | 2.1 (2-2.3)   | 0.6 (0.5-0.7) |
|                    |              | IRR NHW*     | 1.6 (1.5-1.7)      | 1.7 (1.7-1.8) | 1.3 (1.2-1.5) | 1.5 (1.4-1.6) | 1.7 (1.6-1.8) | 1.5 (1.3-1.7) |
|                    | US born      | Rate         | 10.7 (10.4-11)     | 8.2 (8-8.5)   | 1.4 (1.3-1.5) | 4.6 (4.4-4.7) | 4.1 (3.9-4.3) | 1.1 (1-1.3)   |
|                    |              | IRR NHW      | 2.6 (2.5-2.7)      | 3.0 (2.9-3.1) | 1.6 (1.5-1.8) | 2.1 (2.0-2.2) | 3.2 (3.1-3.4) | 2.6 (2.4-2.9) |
|                    |              | IRR US¥      | 1.6 (1.5-1.7)      | 1.7 (1.6-1.8) | 1.2 (1.1-1.4) | 1.4 (1.3-1.5) | 1.9 (1.7-2.1) | 1.8 (1.5-2.1) |
| <b>Chinese</b>     | US born      | Rate         | 3.9 (3-4.8)        | 1.9 (1.3-2.6) | 1.3 (0.8-1.9) | 2.4 (1.8-3.2) | 0.9 (0.5-1.5) | 0.3 (0.1-0.6) |
|                    |              | IRR NHW      | 0.9 (0.8-1.2)      | 0.7 (0.5-0.9) | 1.4 (1-2.1)   | 1.1 (0.8-1.4) | 0.7 (0.5-1.2) | 0.6 (0.3-1.4) |
|                    | Foreign born | Rate         | 3.7 (3.4-4.1)      | 2.8 (2.5-3.2) | 0.6 (0.4-0.7) | 1.7 (1.5-2)   | 1.4 (1.2-1.7) | 0.3 (0.2-0.4) |
|                    |              | IRR NHW      | 0.9 (0.8-1.0)      | 1.0 (0.9-1.2) | 0.6 (0.5-0.8) | 0.8 (0.7-0.9) | 1.1 (1.0-1.3) | 0.6 (0.4-0.9) |
|                    |              | IRR US       | 1.0 (0.8-1.2)      | 1.5 (1.1-2.1) | 0.4 (0.3-0.7) | 0.7 (0.5-1.0) | 1.6 (1.0-2.5) | 0.9 (0.4-2.3) |
| <b>Japanese</b>    | US born      | Rate         | 2.5 (2-3.1)        | 1.4 (1-1.9)   | 0.7 (0.5-1.1) | 1.1 (0.8-1.6) | 0.9 (0.6-1.3) | 0.2 (0.1-0.5) |
|                    |              | IRR NHW      | 0.6 (0.5-0.7)      | 0.5 (0.4-0.7) | 0.8 (0.6-1.2) | 0.5 (0.4-0.7) | 0.7 (0.5-1.0) | 0.5 (0.3-1.0) |
|                    | Foreign born | Rate         | 5.9 (4.9-7.2)      | 4 (3.2-5.1)   | 1.2 (0.8-1.9) | 2.8 (2.1-3.7) | 2.1 (1.5-2.9) | 0.6 (0.3-1.2) |
|                    |              | IRR NHW      | 1.4 (1.2-1.7)      | 1.5 (1.2-1.8) | 1.4 (1.0-2.1) | 1.3 (1.0-1.6) | 1.6 (1.2-2.2) | 1.5 (0.9-2.5) |
|                    |              | IRR US       | 2.4 (1.8-3.2)      | 2.9 (2.0-4.1) | 1.7(1-2.9)    | 2.5 (1.6-3.7) | 2.4 (1.5-3.7) | 2.8 (1.2-6.6) |
| <b>Filipino</b>    | US born      | Rate         | 5 (3.7-6.7)        | 2.8 (1.8-4.1) | 1.3 (0.6-2.4) | 2.8 (1.9-4.2) | 1.1 (0.6-2.1) | 1 (0.4-2.1)   |
|                    |              | IRR NHW      | 1.2 (0.9-1.6)      | 1.0 (0.7-1.4) | 1.5 (0.9-2.4) | 1.3 (0.9-1.8) | 0.9 (0.5-1.5) | 2.3 (1.2-4.5) |
|                    | Foreign born | Rate         | 6.2 (5.7-6.7)      | 4.2 (3.8-4.6) | 1.4 (1.2-1.7) | 2.6 (2.3-3)   | 2.6 (2.3-2.9) | 0.6 (0.5-0.8) |
|                    |              | IRR NHW      | 1.5 (1.4-1.6)      | 1.5 (1.4-1.7) | 1.6 (1.3-1.8) | 1.2 (1.1-1.3) | 2.0 (1.8-2.3) | 1.4 (1.1-1.8) |
|                    |              | IRR US       | 1.2 (0.9-1.6)      | 1.5 (1.1-2.1) | 1.1 (0.6-1.8) | 0.9 (0.7-1.3) | 2.3 (1.3-3.8) | 0.6 (0.3-1.2) |
| <b>Korean</b>      | Foreign born | Rate         | 7.5 (6.7-8.5)      | 5.9 (5.2-6.8) | 0.9 (0.6-1.3) | 3.3 (2.8-4)   | 3 (2.4-3.6)   | 0.8 (0.5-1.3) |
|                    |              | IRR NHW      | 1.8 (1.6-2.1)      | 2.2 (1.9-2.5) | 1 (0.7-1.4)   | 1.5 (1.3-1.8) | 2.4 (2.0-2.8) | 1.9 (1.3-2.7) |
| <b>South Asian</b> | Foreign born | Rate         | 3.3 (2.6-4.2)      | 2.7 (2-3.5)   | 0.4 (0.2-0.8) | 1.2 (0.8-1.8) | 1 (0.6-1.5)   | 0.6 (0.3-1.1) |
|                    |              | IRR NHW      | 0.8 (0.7-1.0)      | 1.0 (0.8-1.2) | 0.4 (0.2-0.7) | 0.5 (0.4-0.8) | 0.8 (0.5-1.1) | 1.4 (0.9-2.3) |
| <b>Vietnamese</b>  | Foreign born | Rate         | 12 (10.9-13.2)     | 8.9 (7.9-10)  | 1.8 (1.4-2.4) | 6.1 (5.3-7)   | 4.8 (4.1-5.7) | 0.5 (0.3-0.9) |
|                    |              | IRR NHW      | 2.9 (2.7-3.2)      | 3.3 (3.3-3.3) | 2.1 (0.2-2.6) | 2.8 (0.4-3.1) | 3.8 (0.5-4.5) | 1.2 (0.9-1.9) |

NHW: Non-Hispanic white

SCC: Squamous cell carcinoma

Adeno: adenocarcinoma

\*: Incidence rate ratio comparing other ethnicity with non-Hispanic white

¥ : Incidence rate ratio comparing foreign born women with US born women of the same ethnicity